

WHAT IS CLAIMED IS:

1. A Formulation comprising
water in an amount of about 0.13 to about 0.18 percent (w/w) of the product formulation,
5 at least one HFA as a propellant,
one or more active ingredients, and
one or more excipients.
2. The formulation according to claim 1 wherein the amount of water is 0.13 to 0.16 %w/w
10 of the product formulation.
3. The formulation according to claim 1 wherein the active ingredients are albuterol sulfate
and ipratropium bromide.
- 15 4. The formulation according to claim 3 wherein the HFA propellant is HFA 134a.
5. The formulation according to claim 4 wherein the excipients are ethanol, citric acid and
polyvinylpyrrolidone.
- 20 6. A metered dose inhaler comprising
a formulation according to claim 3 wherein the albuterol sulfate, and the ipratropium
bromide of the formulation is suspended;
a valve containing a metering chamber that is an area for the formulation to be dosed or
dispensed to reside between actuations or dosings.
- 25 7. A process of making a formulation according to the claim 5 comprising:
preparing a concentrate by adding :
ethanol, citric acid, ipratropium bromide monohydrate, polyvinylpyrrolidone and
albuterol sulfate;
30 preparing a propellant, ethanol and water mixture, said mixture containing:

propellant HFA 134a,
a mixture of ethanol and water;

adding the concentrate to the mixture of propellant-ethanol-water to provide the
formulation.

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